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*THROUGHOUT*  
*FOLDER*

13

6/24/98

C-123B (EXT. DEOPS OFF - PULONS CN)

MAX GROSS WT 56,100 #  
 BASIC WT 32,500 #  
 PAYLOAD 23,600 #

CRUISE SEA LEVEL AT 5,000 FEET  
 0.165 NAMPP.

FUEL REQUIRED FOR 500 N.M.A. 3030 #  
 " " " 1 HR RES 820 #  
 TOTAL FUEL REQ 3,850 #

PAYLOAD 23,600 #  
 FUEL 3,850 #  
 CARGO 19,750 #

DOCUMENT NO. /  
 NO CHANGE IN CLASS. ☐  
☐ DECLASSIFIED  
 CLASS. CHANGED TO: TS ☒ 2011  
 NEXT REVIEW DATE:  
 AUTH: HR 70.2  
 DATE 2010/08/11 REVIEWER 010956

TAKEOFF WT 56,100 #  
 LANDING WT 53,070 # (C/FUEL ONLY USED)

	CG FWD OF 26%	CG 26% OR AFT
T.O. MAX WET POWER S.L.	2,050'	1,450'

	FLAPS - LANDING GRANDS / REV THRUST	FLAPS LANDING GRANDS ONLY	FLAPS FULL DOWN GRANDS / REV THRUST
LANDING S.L.	1,300'	1,520'	1,010'

1649 #2  
4

15,000'  
DZ 0:30

1010

350

		ALTITUDE	DISTANCE	TIME	FUEL	GR WT.
		—	—	—	(38,738)	146,000
		—	—	—	1,000	145,000
		CLIMB	96	0:30	2,000	142,400
		5,000	714	3:38	9,790	132,610
		CLIMB	106	0:27	2,300	130,310
		25,000	244	0:56	3,300	127,010
		DESCENT	0	0:25	300	126,410
		5,000	0	0:30	1,410	125,000
		CLIMB	0	0:22	2,100	122,900
		25,000	350	1:20	3,650	119,250
		DESCENT	72	0:20	895	118,355
		25,000	918	4:00	8,515	109,840
		10,000	—	1:15	2,224	107,616

(354# 01.05.0000)

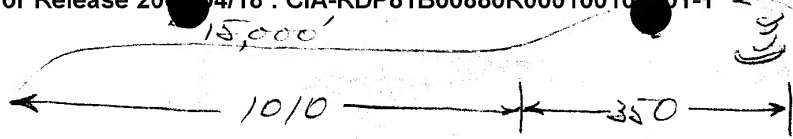
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0201

DATE 30/08/71

VIEWER 010356

1649



Basic Wt 55,262

Cargo 22,000

Fuel Wt 107,262

Fuel 38,738 → (38,384<sup>#</sup> usable)

Simultaneous 146,000

Taxi T.O. etc 1,000

145,000

C to 15K 96 miles 2600<sup>#</sup> fuel 0:30 min  
145,000  
2600

AVE  
TAS  
192

142,400<sup>#</sup> at start of cruise

@ 15K 914 miles → .092 NAMPP for 4,000<sup>#</sup> 197EAS

368  
546 miles → .094 NAMPP for 4,000<sup>#</sup> 199EAS

376  
170  
170 → .095 NAMPP for 1,790<sup>#</sup> 202EAS

6  
914 miles 9,790<sup>#</sup>

142,400  
9,790

AVE TAS  
251  
3.64 hrs  
(3,338)

132,610<sup>#</sup> at end of cruise at 15,000'

C to 15K 106 miles 2,300<sup>#</sup> fuel 0:27 min  
132,610  
2,300

AVE  
TAS  
276

130,310<sup>#</sup> at start of cruise

C to 25K 244 miles → .074 NAMPP for 3,300<sup>#</sup> 178EAS

244  
0

130,310  
3,300

H.B.  
244 CRPA AR TAS  
178 EAS 2.64  
17.4 hrs (0.56)

127,010<sup>#</sup> at end of cruise at 27,000'

C to 15K 141 miles 600<sup>#</sup> fuel 1:25 min (data unavailable - DZ)

LOITERING DZ 0:30 minutes 10 NAMPP 192EAS 2270 RPM 141 miles 1410<sup>#</sup> fuel

127,010  
2,010

600  
2,010

125,000<sup>#</sup> at end of loitering DZ

71649

(2)

11625K 74 miles (Range Zero) 2100# fuel 127 min 256 TAS

122900# at start of cruise at 25,000'

Cr @ 25K 350 miles → .076 NAMPP for 1,500# HB 2400RPM, 183EAS } AVE TAS  
1142  
236 → .11 NAMPP for 2,150# 170EAS } 264  
236  
0 3,650# 1.32 shrs (1120)  
122,900  
3,650

119,250# at end of cruise at 25,000'

Cr to 15K 92 miles 0:20 min 895# (no data avail - same as 25-20)  
119,250  
895

118355# at start of cruise at 15,000'

Cr @ 15K 918 miles → .107 NAMPP for 4,955# LB 10% PL 2100RPM, 150EAS } AVE TAS  
530 → .109 NAMPP for 3,560# 183EAS } 279  
388 miles  
388  
0 8,515# fuel 4.0 hrs (4:00 hrs)  
118,355  
8,515

109840# over high cone

OVER HIGH CONE  
FIRE FUEL W/T 109,840  
109,262  
FUEL REMAIN 2578  
UNUSABLE 354

2,224# usable fuel remaining

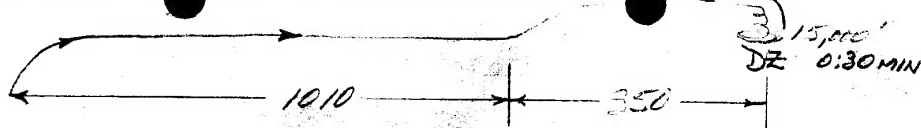
TIME	
climb	0:30
cr @ 15	3:38
climb 25	0:27
cr @ 25	0:56
cr 15	0:25
cr 15	0:30
cr 15	0:22
cr 15	1:20
cr 15	0:20
cr 15	4:00
Hold	1:15
	9:38
TOTAL	13:43

.115 NAMPP 203TAS LB 10% PL 1760RPM 10000ft 1770#/hr

1.256 hrs fuel reserve

1:15 hrs fuel reserve

7649



BASIC WT 85,262  
 GROSS 22,000  
 ZERO FUEL WT 107,262  
 FUEL 52,738 → 52,738<sup>52,738</sup><sub>354</sub> (usable)  
 160,000

By loading with 48,738# fuel (48,384# usable)  
 STARTING 156,000#  
 TAXI etc 1,000  
 Start Climb 155,000#  
 to 15K 125 miles 3100# fuel 38 minutes  
 155,000  
 3,100

End Climb 151,900 start of cruise @ 15,000'  
 Cr 15K 885 miles .065 NAM/# for 3,900# 2400 RPM 185  
 253  
 151,900  
 148,000  
 145,000  
 142,000  
 139,000  
 136,000  
 133,000  
 130,000  
 127,000  
 124,000  
 121,000  
 118,000  
 115,000  
 112,000  
 109,000  
 106,000  
 103,000  
 100,000  
 97,000  
 94,000  
 91,000  
 88,000  
 85,000  
 82,000  
 79,000  
 76,000  
 73,000  
 70,000  
 67,000  
 64,000  
 61,000  
 58,000  
 55,000  
 52,000  
 49,000  
 46,000  
 43,000  
 40,000  
 37,000  
 34,000  
 31,000  
 28,000  
 25,000  
 22,000  
 19,000  
 16,000  
 13,000  
 10,000  
 7,000  
 4,000  
 1,000  
 0

can't climb to 25000'  
 try w/ 10000# less fuel at engine start  
 (38,738# at eng start  
 146,000 " " "  
 145,000 " T.O. gear up)

	Altitude	Distance	Time	GRWT
107,200	—	—	—	107,200
139,253	—	—	2:10	139,253
138,653	S.L.	—	6:00	138,653
135,273	2 MB	110	1:34	3,380
125,173	5,000	900	3:29	16,100
120,672	Climb	209	1:58	4,500
119,302	25,000	141	1:31	1,370
118,702	DESCENT	0	1:25	600
117,342	15,000	0	1:30	1,360
114,602	Climb	0	1:34	2,740
111,332	25,000	350	1:14	3,270
110,438	DESCENT	92	1:20	595
101,058	5,000	918	3:28	7,430
98,068	—	—	1:30	2,940
				41,495
				(full fuel = 42,517#)
				76,068
				75,040
				1,022 (33 min)
			12:03	
			11:30	
			13:33	

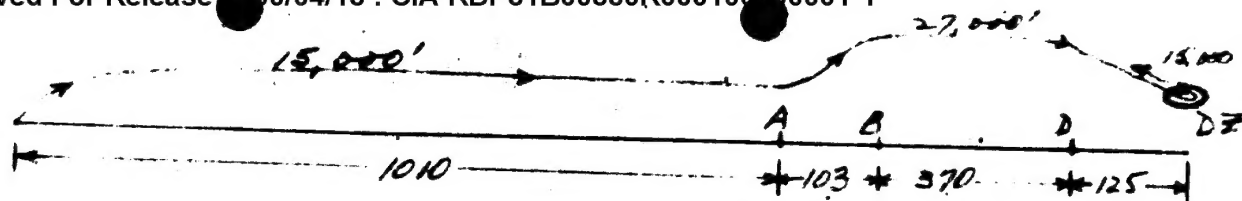
DOCUMENT NO. 3  
 NO CHANGE IN CLASS. ☐  
☐ DECLASSIFIED  
 CLASS. CHANGED TO: TS ☒ SC  
 NEXT REVIEW DATE: 2011  
 AUTH: HR 70-2  
 DATE: 3/10/81 REVIEWER: 010916

MAX TO WEIGHT 143,000

MAX LANDING WT 109,000



#1  
DC 7C



	TAS KTS	ALTITUDE	DISTANCE	TIME	FUEL	GR WT.
START	—	—	—	—	—	117,740
CLIMB	—	—	—	—	310	117,430
CLIMB	—	5 L.	—	—	600	116,830
CLIMB	257	CLIMB	83	0:24	2,390	114,440
CLIMB	258	15,000	927	3:28	9,700	104,740
CLIMB	216	CLIMB	76	1:21	1,920	102,820
CLIMB	258	27,000	27	1:06	326	102,494
CLIMB	276	27,000	370	1:20	3,270	99,224
DESCENT	290	DESCENT	125	1:26	1,190	98,034
CLIMB	279	15,000	—	1:30	1,400	96,634
CLIMB	216	CLIMB	61	1:17	1,620	95,014
CLIMB	283	27,000	64	1:20	774	94,240
CLIMB	283	27,000	370	1:19	3,190	91,050
DESCENT	294	DESCENT	103	1:21	966	90,086
CLIMB	281	15,000	1010	3:35	10,100	79,986
CLIMB	—	—	—	1:30	2,940	77,046
CLIMB	—	—	—	—	40,696	—
CLIMB	—	—	—	—	(full fuel = 42,517#)	75,046
CLIMB	—	—	—	—	—	75,046
CLIMB	—	—	—	12:27	—	—
CLIMB	—	—	—	1:30	—	—
CLIMB	—	—	—	13:57	—	—
MAX T.O. WEIGHT	143,000	—	—	—	—	—
MAX LANDING WT	109,000	—	—	—	—	—



Mission  
profile:DC-7C

Use 310<sup>#</sup> fuel for start, warmup, taxi, runup. This can  
be over T.O. for 10<sup>#</sup>

Use 600<sup>#</sup> fuel for T.O., acceleration, and leaning after  
climb

Use 150<sup>#</sup> fuel for leaning after any subsequent climb

Use 50<sup>#</sup> fuel/hr for heaters

Use 1960<sup>#</sup>/hr fuel for holding pattern at 8,000'

DOCUMENT NO. 4  
NO CHANGE IN CLASS. ☐  
IT DECLASSIFIED  
CLASS. CHANGED TO: TS S C 2011  
NEXT REVIEW DATE: 30/08/11  
AUTH: HR 70-2  
DATE: 30/08/11 REVIEWER: 010950

DC7C

	115,000 111,000	111 107,000	107 103,000	103 99,000	99 95,000	95 91,000
27	270	277	283	(276)	(281)	(285)
26	269	275	281	(273)	(279)	(283)
25	268	273	279	(270)	(276)	(280)
24	280	286	290	294	297	300
23	279	284	288	292	295	298
22	277	282	286	289	292	295

1600 BHP/ENG  
1500 BHP/ENG  
1400 BHP/ENG

DC-7C

Basic wt 75,046  
 Cargo 22,000  
 Zero Fuel 97,046  
 Fuel 42,517  
 T.O. 139,563

DOCUMENT NO. 5  
 NO CHANGE IN CLASS. ☐  
☐ DECLASSIFIED  
 CLASS. OR EXTENDED TO: TS S C 2011  
 NEXT REVIEW DATE:  
 AUTH: HR 70-2  
 DATE 30081 REVIEWER: 010056

T.O. acc, lean 600# 139,563  
 Climb to 15,000 110 miles 3,980  
 134 min 3380# 197 TAS 135,583

CR@15K 258 TAS 2880#/hr 900 miles  
 3.49 hrs 10,100# fuel 135,583  
 3.29 10,100

Climb to 25 85 7260  
 27 2760  
 58 min 4500# fuel 216 TAS 125,483  
 209 miles 4,500 120,983

CR@25K 275 TAS 2680#/hr 141 miles  
 5.13 hrs 1370# fuel 120,983  
 131 1370 119,613

Des to 15K 125 min 600# (Zero) miles  
 119,613  
 600 119,013

Loiter in DZ 130 min 260 TAS 2720#/hr  
 (Zero) miles 1360# 119,013  
 1360 117,653

Climb to 25K 58 5130  
 34 2380  
 34 min 2740# fuel 117,653  
 2740 114,913

Ce to "A" 285 TAS 2680#/hr 350 miles  
 123 hrs 3270# fuel  
 1114

$$\begin{array}{r} 114,983 \\ \underline{3,270} \\ 111,643 \end{array}$$

Down to 15K : 20 min 279 TAS 2680#/hr  
 92 miles 895 #

$$\begin{array}{r} 111,643 \\ \underline{895} \\ 110,748 \end{array}$$

Ce at 15K 267 TAS 2720#/hr 918 miles  
 3.46 hrs 9,430#  
 3178

$$\begin{array}{r} 110,748 \\ \underline{9,430} \\ 101,318 \end{array}$$

Hold at 15K 1:30 2940#

$$\begin{array}{r} 101,318 \\ \underline{2940} \\ 98,378 \end{array}$$

98,378  
 310  
 98,688 ✓

98,688  
 91046  
 1022

DC-7C

BASIC WT	75,046	75,046
CARGO	2,000	2,000
FUEL	42,517 (FROM JANE'S)	FUEL WT = 77,046#
T.O. GRWT	119,563 - MAXIMUM	RES 2,940

1/2 hr Res 2,940#  
Holding at 8,000' - 1960#/hr

H1 CONE 79,986# at start of holding

Cr @ 15,000' 283 TAS 2800#/hr 1010 miles (good to 87,000#)  
3.57 hrs 10,000#  
281 TAS 2800#/hr 1010 miles (good to 91,000#)  
3.59 hrs 10,100# fuel r.k.

DOCUMENT NO. 6  
NO CHANGE IN CLASS. ☐  
☐ DECLASSIFIED  
CLASS. CHANGED TO: TS ☒ 2011  
NEXT REVIEW DATE:   
AUTH: H370-2  
DATE: 3/6/81 REVIEWER: 010958

79,986  
10,100

→ 90,086# at start of cruise at 15,000'

Descent 14,000  
15,000

Using 20,000' as average cruise

294 TAS 2760#/hr 103 miles  
0.35 hrs 966#

90,086  
966

→ 91,050# at start of descent to 15,000'

Cr @ 27,000' 283 TAS 2440#/hr 370 miles (good to 99,000#)

1.31 hrs 3,190#  
91,050#

→ 94,240# at start of cruise at 27,000'

②

climb 15,000' <sup>27,000'</sup>  
 $\frac{34}{17} \text{ min}$   $\frac{3210}{1840} \# \text{ fuel}$  TAS = 216 125 miles  
 .595 hrs (36 min) : 19 min of cruise at 2440#/hr  
 .3165 hrs 2440#/hr = 774# fuel

94,240

1,470 for climb

150 for leaving after climb

774 for cruise at 27,000'

→ 96,634# at start of climb

After 30 min (15K) 223 IAS 279 TAS 2800#/hr  
 0.50 hrs 1400#

96,634

1,400

→ 98,034# at start of loiter in DZ

Descent 20,000' <sup>27,000'</sup>  
 15,000' Using 20,000' as average cruise  
 290 TAS 2760#/hr 125 miles  
 .431 hrs 1190#

98,034

1,190

→ 99,224# at start of descent to 15,000'

Cr @ 27,000' 276 TAS 2440#/hr 370 miles  
 1.34 hrs 3270#

99,224

3,270

→ 102,494# at start of cruise at 27,000'

Climb 15,000 <sup>27,000</sup>  
 $\frac{40}{19}$  min  $\frac{3650}{1770}$  # fuel TAS 216 103 miles  
 .486 hrs (2.9 min)  $\therefore$  8 min cr at 2440 #/hr  
 .133 hrs 2440 #/hr = 326 # fuel  
 102,494

1,770 for climb  
 150 for leaning out  
 326 for cruise at 27,000'  
 $\rightarrow$  104,740 # at start of climb

Cruise @ 15,000 268 TAS 2800 #/hr 927 miles  
 3.46 hrs 9700 #  
 104,740  
 $\frac{9700}{114,440}$   
 $\rightarrow$  114,440 # at start of cruise at 15,000'

Climb to 15,000 207 TAS 24 min 83 miles  
 114,440  
 2,390 fuel for climb  
 600 T.O. acceleration, and leaning of the climb  
 $\rightarrow$  117,430 # T.O. Gr. Wt.

Start, taxi, etc. 117,430  
 $\frac{310}{117,740}$   
 $\rightarrow$  117,740 # at engine start



	TAS	ALT	TIME	FUEL	GR WT
ENG. START	—	—	—	—	117,740
WARM-UP, TAXI, ETC	—	—	—	310	117,430
T.O., ACC, LEAVING	—	S.L.	—	600	116,830
CLIMB TO 15K	207	CLIMB	83 <sup>0.24</sup>	2,390	114,440
CR TO "A"	268	15,000'	927 <sup>3.28</sup> 3.46	9,700	104,740
CLIMB TO 27K	216	CLIMB	76 <sup>1.21</sup>	1,920	102,820
CRUISE TO "B"	276	27,000'	27 <sup>1.06</sup>	326	102,494
CRUISE TO "D"	276	27,000'	370 <sup>1.20</sup> 1.34	3,270	99,224
DESCEND TO DZ	290	DESCENT	125 <sup>1.26</sup> 1.31	1,190	98,034
LOITER	279	15,000'	— <sup>1.30</sup>	1,410	96,634
CLIMB TO 27K	216	CLIMB	61 <sup>1.17</sup>	1,620	95,014
CRUISE TO "D"	283	27,000'	64 <sup>1.20</sup>	774	94,240
CRUISE TO "B"	283	27,000'	370 <sup>1.19</sup> 1.31	3,190	91,050
DESCEND TO "A"	294	DESCENT	103 <sup>1.21</sup> 1.35	966	90,086
CRUISE at 15K	281	15,000'	1010 <sup>2.35</sup> 3.59	10,100	79,986
HOLD @ 8K	—	—	— <sup>1.30</sup>	2,940	77,046
CARGO <sup>3,000#</sup>	—	—	—	—	75,046
BASIC WT	—	—	—	—	75,046
			3216		